

Health Spending and Political Influence: The Case of Earmarks and Health Care Facilities

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Earmarks, otherwise known as Congressionally directed spending requests, are a historically significant means of political influence over budgets. In this brief, we report on the results of a longitudinal study of federal earmarks affecting health care facilities and public health. We analyzed 10 years of earmark for health care facilities and examined the correlates of being in the top 50% of earmark recipients for each year. Having representatives or senators serving on the respective Appropriations committees were shown to have increased odds of being a top earmark recipient, as was being in jurisdictions with greater poverty. However, health-related measures of need were not significantly associated with being a top earmark recipient.

KEY WORDS: earmarks, health care finance, political influence, public health finance

The majority of public health practice in the United States occurs in public agencies that are dependent upon government funds for support.¹ Therefore, the allocation of funds and services to support public health can be political, possibly at the expense of evidence-based indicators of need.^{1,3} Congressionally directed spending requests, also known as Congressional earmarks, are a historically significant means of political leverage over budgets.⁴ Congressional earmarks are legislative provisions that direct spending of approved funds or tax provisions to specific projects, individuals, or groups. Previous studies have examined correlates of earmarks in defense, construction, and agriculture among other areas,⁵⁻⁹ but the relationship within the public health and/or health care sectors is not well-explored. This study assesses the association between political influence, social need, and Congressionally-earmarked spending in health and health care.^{10,11}

J Public Health Management Practice, 2015, 21(2), 161–166
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● Methods

We conducted a longitudinal analysis on a decade's worth of data related to earmarked government grant awards, political tenure and committee appointments, and county-based measures of need. First, we geocoded approximately 71 000 grants administered through the Health Resources and Services Administration (HRSA) between FY1999 and FY2010 and adjusted the amounts to constant 2012 dollars. Health Resources and Services Administration has a designated program called "Health Care and Other Facilities (C76)" that tracks earmarked spending on health care facilities. We created the dependent variable by aggregating total earmarks by county and year, and dichotomizing the result at the 50th percentile, which determined if a county was in the top 50% of earmark recipients in a given year. This was selected to better elucidate the importance of political influence and other variables on being a "top recipient" of earmarks.

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The authors have no conflicts to disclose.

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Supplemental digital content is available for this article. Direct URL citation appears in the printed text and is provided in the HTML and PDF versions of this article on the journal's Web site (www.JPHMP.com).

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DOI: 10.1097/PHH.0000000000000116

*C76 program allows designated grantees: "To construct, renovate, expand, equip, or modernize health care facilities and other health care related facilities. All funds awarded should be expended solely for carrying out the approved projects in accordance with the provisions of the fiscal year [e.g., 2008] Congressional Appropriations Bill." (HRSA)

Second, we created 3 county-based measures of political influence using Charles Stewart's political tenure and appointments data sets:¹²

1. Representation on the House or Senate Appropriations Committees
2. Representation on the House Energy and Commerce committee or Senate Health, Education, Labor, and Pensions (HELP) committee
3. Representation with chair positions on any House or Senate committee

We used county rather than Congressional districts as units of analysis because of the outcomes of interest being at the county level and because they are more stable over time. We focused on the Appropriations, House Energy and Commerce committee, and the Senate HELP committee because these committees have direct oversight of HRSA. The measures allowed for an individual representative to be counted multiple times across counties because Congressional districts and counties do not necessarily align. For example, if a Congressional district covered multiple counties, the tenure and appointments of the representative of that district was counted in each of those counties. For the purposes of this analysis, each county within a state was coded as having the same Senate level influence because senators function at the state level.

Third, we compared our measures of earmark expenditures by comparing earmark data from the Office of Management and Budget (OMB) with HRSA data on earmarks (see Figures 1 and 2 in Appendix). Fourth, we merged yearly poverty estimates from the Census with Centers for Disease Control and Prevention data on age-adjusted mortality to create measures of need. Economic depression is a theoretically important construct for this line of inquiry given HRSA's focus on low-capacity areas, but the importance of health indicators on other earmark areas has not been shown to be significant.⁵ Poverty indicators have been shown to be important predictors of earmark appropriations in other areas. We explored other measures of political influence, such as the total number of representatives per county and number of terms served, and other measures of need specific to health care and health care facilities. These variables were not included in the final model due to issues with collinearity with poverty and age-adjusted mortality. We accounted for possible clustering of data at county and state-specific effects over time by using a generalized linear latent and mixed model (GLLAMM)¹³ with random effects at the county and state levels.

● Results

Overview of earmarks

Between FY1999-FY2010, HRSA awarded approximately \$80 billion in grants in total, but government-tracked data on earmarked spending administered through HRSA for this time period is incomplete. The OMB only published earmark data for FY2005, FY2008, FY2009, and FY2010. Earmarks accounted for 9% of total HRSA grant awards according to OMB data for FY2005. In FY2008-FY2010, earmarks accounted for approximately 5% of total HRSA grant awards annually. This study's other source of earmark tracking—HRSA's "Health Care and Other Facilities (C76)" program, accounted for the majority of total HRSA earmarks in years where both C76 data and OMB earmark data exist. Congressionally earmarked funds for health care facilities and equipment were administered via HRSA's C76 program each year between FY1999 and FY2010 (Appendix Figure 3), except for FYs 2006 and 2007.

Expenditures for health care and other facilities grew from \$105 million in FY1999 to \$282 million in FY2010. Data of the OMB show, in total across all earmarks, Congress-obligated HRSA to award \$382.5 million in earmarks in FY2010 (approximately \$407 million in 2012 constant dollars). Health care and other facilities accounted for approximately three-quarters of these total earmarked dollars. The remaining earmarked projects were targeted toward patient services and training/workforce priorities and were administered elsewhere in HRSA.

Three billion dollars were directed in earmarks for health care and other facilities from FY1999 through FY2010; \$1.8 billion were directed by Congress to private corporate entities, \$890 million to state and local governmental entities, and \$305 million went to all other organizations. Included in the \$305 million to other organizations was \$42 million to quasi-governmental organizations like public universities.

Political influence and earmarks

Our analysis of political influence showed that between FY1999 and FY2010, approximately 6% of counties across the United States had at least 1 representative with a Chair position in either the House or Senate. Nineteen percent had at least 1 representative on the House Appropriations committee, and 15% of counties had a representative on the Energy and Commerce committee, which oversees HRSA. Approximately 66% of counties were in states with at least 1 senator who chaired a committee, and 34% of counties were in a state with at least 1 senator on the HELP committee (which oversees HRSA). Seventy three percent of

counties were in a state that had at least 1 senator on the Appropriations Committee. Additional data on political influence are presented in Appendix Table 1.

Our analysis identified several measures of political influence as predictive of a county being in the top 50% of total earmarks received after holding constant fiscal year, county population size, county quartile of poverty, and county quartile of age-adjusted mortality (Table 1). A county with at least 1 representative who held any committee chair position had 50% greater odds of being in the top 50% of earmark recipients compared with a county without at least 1 such representative (odds ratio: 1.5, 95% confidence interval: 1.04-2.26). Similarly, a county that had any representatives on the Appropriations committee was over twice as likely (odds ratio: 2.2, 95% confidence interval: 1.7-2.9) to be in the top 50% of earmark recipients in a given year compared with 1 without.

Social need and earmarks

Increasing poverty was associated with an increasing likelihood of being in the top 50% of earmark recipients. Each quartile of poverty had progressively higher odds (compared with the lowest quartile of poverty). The health-related measure of need, age-adjusted mortality, did not demonstrate a statistically significant association with being in the top 50% of earmark recipients. Counties with increasingly larger populations were associated with higher odds of being in the top 50% of earmark recipients (Appendix Table 2).

Discussion

Historically, earmarks have served as a means for members of Congress to augment or adjust a President's budget as well as a way for individual representatives and senators to achieve specific budgetary and legislative goals. Earmarks have accounted for at least \$3 billion of \$80 billion allocated to HRSA in the past 15 years and have played an important role in improving health care and population health.¹⁴ A popular criticism of earmarks is that they are allocated on the basis of political influence, largely independently from actual need. However, in line with recent research,⁵ our analysis showed that this was not completely true.

We found that earmarks administered by HRSA were influenced by political factors, particularly when county representatives served as a member of the Appropriations committee or was a committee chair. However, earmarks administered through HRSA also addressed indicators of need, specifically poverty; the poorer the county, the more likely it was to be in the top 50% of HRSA earmark recipients. This was not the case for measures of age-adjusted mortality. This influence bears further examination. Poverty is a historically popular and regularly updated measure of need but it may be too broad to be the sole measure when considering the health-related needs of populations—even during political negotiations. At present, there is a moratorium on earmarks but it is possible they may return. Any renewed earmarks affecting population health should be responsive to poverty and health-specific needs. These 2 track closely but do not completely overlap and therefore should both be considered.

TABLE 1 • Odds Ratio of Being in Top 50% of Earmark Recipients in a Given Year, by County, FY1999-FY2010^a

	Odds Ratio	95% Confidence Interval	P
Chair (representative)	1.5	1.04-2.3	.03
Appropriations (representative)	2.2	1.7-2.9	<.001
Energy/Commerce (representative)	1.1	0.9-1.4	.50
Chairperson (senator)	1.2	0.8-1.6	.37
On HELP committee (senator)	0.54	0.4-0.7	<.0001
Appropriations senator	1.7	1.03-2.3	<.001
Age-adjusted mortality Q1	Ref		
Age-adjusted mortality Q2	1.2	0.96-1.54	.11
Age-adjusted mortality Q3	1.0	0.8-1.4	.80
Age-adjusted mortality Q4 (Highest)	1.0	0.7-1.3	.79
Poverty Q1	Ref		
Poverty Q2	1.7	1.3-2.2	<.001
Poverty Q3	2.2	1.6-3.1	<.001
Poverty Q4 (Highest)	3.2	2.1-5.0	<.001

^aThis table does not show FY and county population, which were included in the final model as control variables (Appendix Table 1).

● Conclusions

Our findings highlight that while the traditional view of earmarks as instruments of political influence may be true, need-based factors, measured here by poverty, also factor in the allocation of earmarked spending. These findings show that earmarks actually may have added funds to and supported infrastructure in impoverished communities. While politics is an undeniable influence in public health spending, we encourage an evidence-based perspective on budgeting processes. In the event earmarks return, public health policymakers and practitioners can benefit from viewing earmarks as a means to augment funding in their local communities and aim to inform Congress about health-related measures of need when Congressionally directed spending requests are discussed.

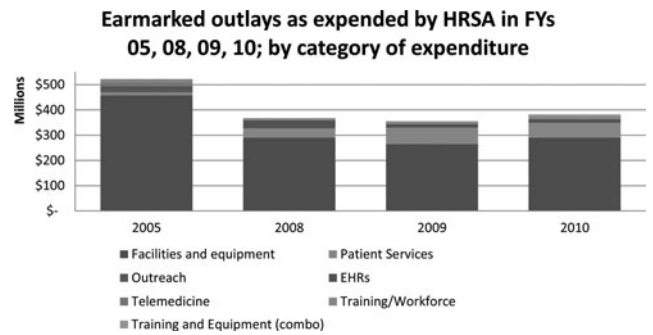
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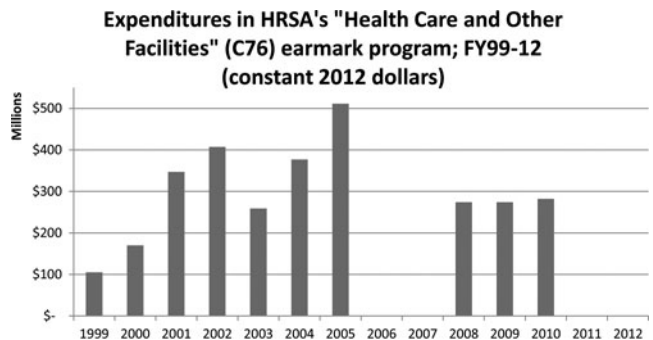
● Appendix

Figure 1 ● Earmarked Outlays as Tracked by the Office of Management and Budget*



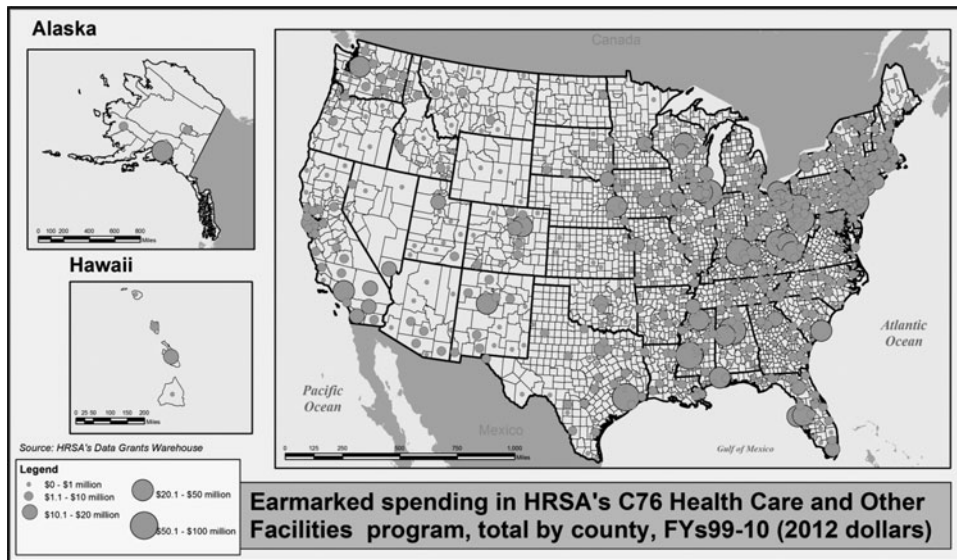
*See Figure 1 as Supplemental Digital Content 1 available at <http://links.lww.com/JPHMP/A103>, which depicts the figure in higher resolution and in higher resolution color.

Figure 2 ● Expenditures in HRSA's C76 Program*



*See Figure 2 as Supplemental Digital Content 2 available at <http://links.lww.com/JPHMP/A104>, which depicts the figure in higher resolution color.

Figure 3 ● Aggregated Congressional Earmarks for Health Care and Other Facilities in HRSA’s C76 Program, by County FYs 1999-2010*



*See Figure 3 as Supplemental Digital Content 3 available at <http://links.lww.com/JPHMP/A105>, which depicts the figure in higher resolution color.

TABLE 1 ● Percent of All US Counties With Political Influence Characteristics of Interest, FY1999-FY2010

Political Influence Variables	Yes	No
County has at least 1 representative that holds a Chair position	6%	94%
County has representative on Appropriations committee	19%	81%
County has representative on energy/commerce	15%	85%
At least 1 senator is committee chair	66%	34%
At least 1 senator on HELP committee	34%	66%
At least 1 senator on Appropriation Committee	73%	27%

TABLE 2 • Odds of County Being in Top 50% of Earmark Recipients by Year, FY1999-FY2010^a

Variable	OR	P	95% CI
Year (control variable that accounts for number of awards by year)			
FY1999	Ref		
FY2000	14.68	<.001	8.15-26.47
FY2001	50.9	<.001	29.3-88.4
FY2002	113.6	<.001	61.4-209.9
FY2003	108.1	<.001	57.9-201.9
FY2004	164.5	<.001	86.0-314.9
FY2005	302.4	<.001	159.6-572.8
FY2008	279.7	<.001	150.1-521.1
FY2009	313.9	<.001	164.4-599.3
FY2010	244.8	<.001	127.7-469.4
Chair-Representative	1.5	.03	1.0-2.3
Appropriations-Representative	2.2	<.001	1.7-2.9
Energy/Commerce-Representative	1.1	.50	0.9-1.4
Chair-Senate	1.2	.37	0.8-1.6
HELP-Senate	0.54	<.001	0.39-0.74
Appropriations-Senate	1.7	<.001	1.3-2.3
Population size (control variable for jurisdiction size)			
<25 000	0.0	<.001	0.0-0.0
25 000-49 000	0.0	<.001	0.0-0.0
50 000-99 000	0.1	<.001	0.0-0.1
100 000-249 000	0.2	<.001	0.1-0.3
250 000-499 000	Ref		
500 000-999 000	2.7	.00	1.5-4.7
10 000 00+	11.1	<.001	5.8-21.0
Age-adjusted mortality			
Age-adjusted mortality Q1 (Lowest)	Ref		
Age-adjusted mortality Q2	1.2	.11	0.96-1.54
Age-adjusted mortality Q3	1.0	.80	0.78-1.39
Age-adjusted mortality Q4 (Highest)	1.0	.79	0.68-1.34
Poverty			
Poverty Q1 (lowest)	Ref		
Poverty Q2	1.7	<.001	1.35-2.21
Poverty Q3	2.2	<.001	1.56-3.14
Poverty Q4 (Highest)	3.2	<.001	2.11-4.96
Constant	0.0	<.001	0.00-0.00

^aHigh odds ratios for different years reflects a greater number of grants being given out each year successively compared to FY99.